1D Array

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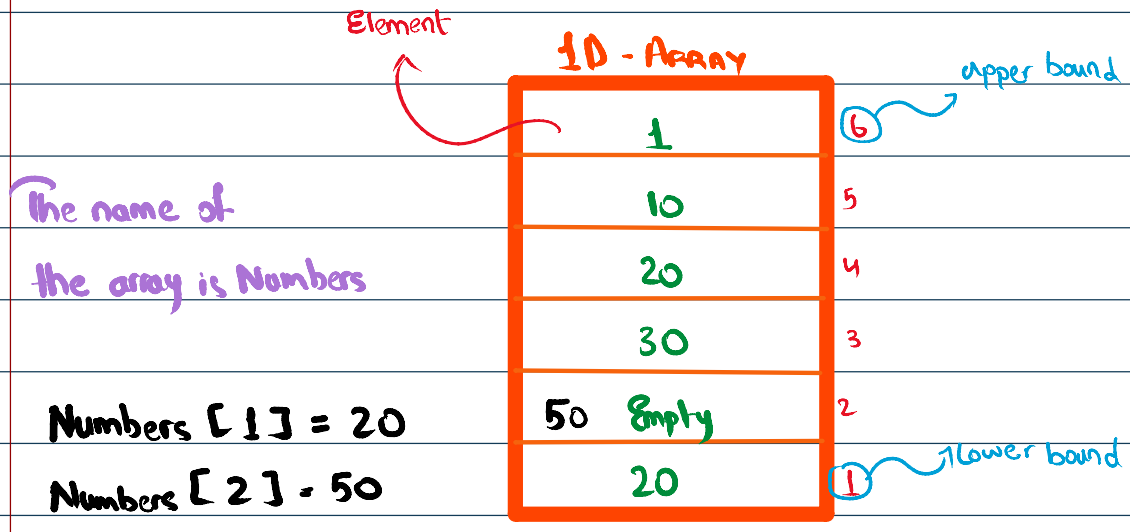
1D - Array

Stores a list of variables of the same datatype

Concept Explaination

Declaration of Each variable ~→ Solution Array.

- Stores multiple values
- Same data type
- Data store on position known as index



Case 1 : Declaration Of Array

DECLARE NAME OF ARRAY : ARRAY [LOWER BOUND : UPPERBOUND] OF DATATYPE

DECLARE NUMBERS : ARRAY [1 : 6] OF INTEGER

Write a pseudocode of a program in which input a number and store it in array position 2 (array name is Numbers)

INPUT Numbers[2]

NOTE: For storing the value always use For....Loop

Question: Construct an array of 565 elements and store names in it which user will input.

DECLARE NAMES : ARRAY [1:565] OF string

FOR INDEX = 1 to 565

    Input Names[INDEX]

END FOR

THEY SHOULD SOLVE

Question: Construct an array of 100 Elements and store "No Data" in all Element (Name of Array) = ResultArray

```
DECLARE RESULTARRAY : ARRAY [1 : 100] OF STRING
    For index : 1 to 100
        ResultArray[index] = "NO DATA"
    END FOR
```

CASE 2 : SEARCHING IN AN ARRAY

- **NOTE :** For searching purpose you need to use selection statement.

Question : There is an Array which contains names of 500 students search at which position "AHMAR" is stored (NOA : "NAMES")

```
DECLARE index : integer.
FOR INDEX = 1 to 500
    IF Names[index] = "AHMAR"
        Then
            print Index
    END IF
END FOR.
```

THEY SHOULD SOLVE

Question : Already there is an array of name "SearchBox" with 500 Elements of data type string

- Search through the array and find (how many times) "Empty" was repeated

```
Repeat = 0
For index = 1 to 500
    If SearchBook[index] = "Empty"
        Then
            Repeat = Repeat + 1
    End If
EndFor
```